

Notice of Allowability

Application No.

10/632,840

Examiner

Tuan V. Thai

Applicant(s)

YAMAMOTO ET AL.

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 01/06/2006.
2. ☒ The allowed claim(s) is/are 27-36 renumbered as 1-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 07/625,154.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/21/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


TUAN V. THAI
PRIMARY EXAMINER

Application/Control Number: 10/632,840

-Page 2-

Art Unit: 2186

IN THE UNITED STATES PATENT AND

In re application of: Yamamoto et al. **Group:** 2186
Serial No.: 10/632,840 **Examiner:** Tuan Thai
For: **CACHE CONTROL METHOD AND APPARATUS.**

1. This action is responsive to amendment filed January 06, 2006. Claims 27-36 are now allowed. Claims 1-26 have been canceled.

2. The nonstatutory double patenting rejection is withdrawn due to the terminal Disclaimer filed January 06, 2006.

3. The rejection of claims 27-36 under 35 USC § 112 second paragraph is withdrawn due to the amendment filed January 06, 2006.

4. The copies of documents submitted by Applicant's counsel which was unable to located as listed on the PTO-1449 filed 08/21/2003 have now been considered.

REASONS FOR ALLOWANCE

5. The following is an Examiner's Statement of Reasons for Allowance:

Art Unit: 2186

The prior arts of record do not teach nor suggest, *either alone or in combination*, all the limitations of the amended claims of the current invention (claims 27, 31, 35 and 36) particularly the partial write operation claimed writes data without changing format of the disk; the host therefore can send only user data, not the format information, since the controller is aware of the format information, data can be written to the cache without accessing the disk for format information, even if the record is not stored in the cache; for example, the controller receives a write request and write data from the data processing unit to update data stored in the variable length data field of one the record except data stored in the control field, regardless of whether or not the one record is stored in the cache memory, and if the write data received from the data processing unit does not meet a condition with respect to the variable length data field of the one record, the controller notifies data processing unit of an error message without accessing the one record of the storage unit. In light of the foregoing, claims 27, 31, 35 and 36 of the present application are found to be patentable over the prior arts.

Claims 28-30 and 32-34 further limit the allowable independent claims 27 and 31. These claims are therefore allowable for the same reason as set forth above.

Any comments considered necessary by Applicant must be

Art Unit: 2186

submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (571)-272-4187. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

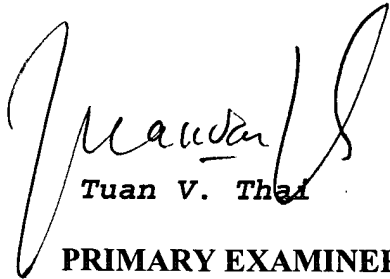
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (571)-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/632,840

-Page 5-

Art Unit: 2186

TVT/February 16, 2006



Tuan V. Thai

PRIMARY EXAMINER

Group 2100